

LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A surgical probe, comprising:
a single, relatively short tubular shaft defining a distal region and a proximal region;
an ablation coagulation element configured to emit energy for ablating~~coagulating~~ tissue
and forming a lesion within tissue, the ablation coagulation element defining an ablation
coagulation element configuration on the distal region of the relatively short tubular shaft; and
a stimulation element configured to emit energy to tissue for stimulating tissue and
evaluating formation of the lesion by supplying tissue stimulation energy to a first side of a lesion
that is formed as a result of ablating tissue such that a second side of the lesion can be monitored
to determine a depth of the lesion, the stimulation element defining a stimulation element
configuration on the distal region of the same relatively short tubular shaft, the stimulation
element configuration being different than the ablation coagulation element configuration.
2. (Original) A surgical probe as claimed in claim 1, wherein the stimulation element
comprises a stimulation electrode.
3. (Currently Amended) A surgical probe as claimed in claim 2, wherein the ablation
coagulation element comprises an ablation coagulation electrode.
4. (Currently Amended) A surgical probe as claimed in claim 3, wherein the ablation
coagulation electrode defines an ablation coagulation electrode length, the stimulation electrode
defines a stimulation electrode length, and the ablation coagulation electrode length is greater
than the stimulation electrode length.
5. (Original) A surgical probe as claimed in claim 1, wherein the stimulation element
comprises a stimulation electrode pair.

6. (Currently Amended) A surgical probe as claimed in claim 1, wherein the ablation coagulation element comprises at least two longitudinally spaced ablation coagulation electrodes, the respective size and spacing of the at least two ablation coagulation electrodes being such that simultaneous transmission of energy thereby to an indifferent electrode will produce an area of ablated coagulated tissue that spans the at least two ablation coagulation electrodes.

7. (Withdrawn – Currently Amended) A surgical probe as claimed in claim 1, wherein the ablation coagulation element comprises a plurality of longitudinally spaced ablation coagulation elements and the stimulation element comprises a plurality stimulation elements, a stimulation element being located between a pair of adjacent ablation coagulation elements on the relatively short tubular shaft.

8. (Previously Amended) A surgical probe as claimed in claim 1, wherein at least a portion of the distal region of the relatively short tubular shaft is malleable.

9. (Previously Amended) A surgical probe as claimed in claim 1, further comprising a handle associated with the proximal region of the relatively short tubular shaft.

10. (Currently Amended) A surgical probe as claimed in claim 1, wherein the stimulation element is located distally of the ablation coagulation element.

11-26. (Canceled)

27. (Currently Amended) A surgical system, comprising:
- a source of ablation coagulation energy;
- a source of stimulation energy; and
- a surgical probe, adapted to be operably connected to the source of ablation coagulation energy and the source of stimulation energy, the surgical probe including a single, relatively short tubular shaft defining a distal region and a proximal region, an ablation coagulation element configured to emit energy for ablating coagulating tissue and forming a lesion within tissue, the ablation coagulation element defining an ablation coagulation element configuration on the distal region of the relatively short tubular shaft, and a stimulation element configured to emit energy to tissue for stimulating tissue and evaluating formation of the lesion by supplying tissue stimulation energy to a first side of a lesion that is formed as a result of ablating tissue such that a second side of the lesion can be monitored to determine a depth of the lesion, the stimulation element defining a stimulation element configuration on the distal region of the same relatively short tubular shaft, the stimulation element configuration being different than the ablation coagulation element configuration.
28. (Currently Amended) A surgical system as claimed in claim 27, further comprising:
- an ablation coagulation energy line connected to the ablation coagulation element and to an ablation coagulation energy connector configured to be connected to the source of ablation coagulation energy; and
- a stimulation energy line connected to the stimulation element and to a stimulation energy connector configured to be connected to the source of stimulation energy.
29. (Currently Amended) A surgical system as claimed in claim 28, wherein the ablation coagulation energy connector and stimulation energy connector define different configurations.

30. (Currently Amended) A surgical system, comprising:
- a source of ablation coagulation energy;
- a source of stimulation energy; and
- a surgical probe, adapted to be operably connected to the source of ablation coagulation energy and the source of stimulation energy, the surgical probe including a relatively short shaft defining a distal region and a proximal region, a handle associated with the proximal region of the relatively short shaft, an ablation coagulation element configured to emit energy for ablating coagulating tissue and forming a lesion within tissue, the ablation coagulation element defining an ablation coagulation element configuration on the distal region of the relatively short shaft, and a stimulation element configured to emit energy to tissue for stimulating tissue and evaluating formation of the lesion by supplying tissue stimulation energy to a first side of a lesion that is formed as a result of ablating tissue such that a second side of the lesion can be monitored to determine a depth of the lesion, the stimulation element defining a stimulation element configuration on the distal region of the relatively short shaft, the stimulation element configuration being different than the ablation coagulation element configuration, wherein the ablation coagulation energy connector is carried by the handle and the stimulation energy line extends through the handle.
31. (Original) A surgical system as claimed in claim 27, wherein the stimulation element comprises a stimulation electrode.
32. (Currently Amended) A surgical system as claimed in claim 31, wherein the ablation coagulation element comprises an ablation coagulation electrode.
33. (Currently Amended) A surgical system as claimed in claim 32, wherein the ablation coagulation electrode defines an ablation coagulation electrode length, the stimulation electrode defines a stimulation electrode length, and the ablation coagulation electrode length is greater than the stimulation electrode length.

34. (Currently Amended) A surgical system as claimed in claim 27, wherein the ablation coagulation element comprises at least two longitudinally spaced ablation coagulation electrodes, the respective size and spacing of the at least two ablation coagulation electrodes being such that simultaneous transmission of energy thereby to an indifferent electrode will produce an area of ablatedcoagulated tissue that spans the at least two ablation coagulation electrodes.

35. (Previously Amended) A surgical system as claimed in claim 27, wherein at least a portion of the relatively short tubular shaft is malleable.

36. (Previously Amended) A surgical system as claimed in claim 27, wherein the source of stimulation energy is configured for monitoring electrical impulses sensed by the stimulation element.

37. (Withdrawn – Currently Amended) A surgical system as claimed in claim 27, wherein the ablation coagulation element comprises a plurality of longitudinally spaced ablation coagulation elements and the stimulation element comprises a plurality of located between respective pairs of adjacent ablation coagulation elements.

38. (Withdrawn – Currently Amended) A surgical system as claimed in claim 27, wherein the ablation coagulation element comprises a pair of longitudinally spaced ablation coagulation elements and the stimulation element is located between the ablation coagulation elements.

39. (Currently Amended) A surgical probe as claimed in claim 1, wherein the ablation coagulation element and the stimulation element are carried on the same relatively short tubular shaft such that the ablation coagulation element and the stimulation element are longitudinally fixed relative to one another.

40. (Currently Amended) A surgical probe as claimed in claim 1, wherein the distal portion of the relatively short tubular shaft includes a unitary outer member and the ablation coagulation element and the stimulation element are both carried on the unitary outer member.

41. (Canceled).
42. (Currently Amended) A surgical probe as claimed in claim 1, wherein the ablation ~~coagulation~~ element and the stimulation element define respective diameters and the diameter of the ablation ~~coagulation~~ element is substantially equal to the diameter of the stimulation element.
43. (Currently Amended) A surgical system as claimed in claim 27, wherein the ablation ~~coagulation~~ element and the stimulation element are carried on the same relatively short tubular shaft such that the ablation ~~coagulation~~ element and the stimulation element longitudinally fixed relative to one another.
44. (Currently Amended) A surgical system as claimed in claim 27, wherein the distal portion of the relatively short tubular shaft includes a unitary outer member and the ablation ~~coagulation~~ element and the stimulation element are both carried on the unitary outer member.
45. (Canceled).
46. (Current Amended) A surgical system as claimed in claim 27, wherein the ablation ~~coagulation~~ element and the stimulation element define respective diameters and the diameter of the ablation ~~coagulation~~ element is substantially equal to the diameter of the stimulation element.
47. (Currently Amended) A surgical probe, comprising:
a single, relatively short tubular shaft defining a distal region and a proximal region;
means for ablating ~~coagulating~~ tissue on the distal region of the relatively short tubular shaft and forming a lesion within tissue; and
means, having a different configuration than the means for ablating ~~coagulating~~ tissue, for stimulating tissue on the distal region of the same relatively short tubular shaft and evaluating formation of the lesion.
48. (Previously Amended) A surgical probe as claimed in claim 47, wherein at least a portion of the distal region of the relative short tubular shaft is malleable.

49. (Previously Amended) A surgical probe as claimed in claim 47, further comprising: a handle associated with the proximal region of the relatively short tubular shaft.

50. (Currently Amended) A surgical probe as claimed in claim 47, wherein the means for stimulating tissue is located distally of the means for ablating or coagulating tissue.

51. (Previously Presented) The surgical probe of claim 1, wherein the relatively short tubular shaft is linear.

52. (Previously Presented) The surgical probe of claim 27, wherein the relatively short tubular shaft is linear.

53. (Previously Presented) The surgical probe of claim 9, wherein the relatively short tubular shaft is coaxial with the handle.

54. (Previously Presented) The surgical probe of claim 49, wherein the relatively short tubular shaft is coaxial with the handle.